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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,700	08/07/2001	Gary Martin Oosta		8785

7590 01/02/2004

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EXAMINER

TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/922,700

Applicant(s)

OOSTA, GARY MARTIN

Examiner

Cam Y T Truong

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

**DETAILED ACTION**

1. Claims 1-24 are pending in this Office Action.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 11, 13-17 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Rivette et al (or hereinafter "Rivette") (USP 5991751).

As to claims 1 and 13, Rivette teaches the claimed limitations:

selecting a data set for analysis from said collection of documents (the system correlates and analyzes the information in the financial databases 638 with patent information to determine, among other things, the financial impact of patents on the customer's and competitors' respective businesses. Information includes money spent on R& D on a product line basis, gross and net revenue on a product line basis, patent licensing revenue, patent acquisition costs. Information is represented as a data set. The above information shows that the system selects information from the financial database to determine among other things, see col. 22, lines 1-5);

selecting at least one analysis means for said data set including an analysis algorithm based on the structure of said data set (selecting the competitive analysis to

analysis information in patents based on structure of information in patent. The competitive analysis includes several steps to identify inventors of key technology. In step 10406, an operator associated with the corporate entity located at a client 304, 306 issues a command to the patent citation module 1004 to run a patent citation report on the patents in a group specified by the operator. In the step 10408, the operator, by reference to the patent citation report, identifies the companies who are the current assignee of the citing patents. These companies may be potentially working in the same technological areas as the source patents since their patents either cited the source patents or they were cited in the source patent. Algorithm means a finite sequence of steps for solving a logical problem. Thus, the competitive analysis, which includes a sequence of steps, is represented as an analysis algorithm, see fig. 104, col.102, lines 5-30);

using the selected analysis means to produce a result from the analysis comprising relationships among the documents in the selected set (using the competitive analysis to identify patents cited by corporate entity's patents and potential competitors and then analyze competitors' potential future product lines based on when the patents were filed. In the step 10408, the operator, by reference to the patent citation report, identifies the companies who are the current assignee of the citing patents. These companies may be potentially working in the same technological areas as the source patents since their patents either cited the source patents or they were cited in the source patent. The system uses the competitive analysis to product a result such as source patent 5327235, which has a citing patent 5345264. There are

Art Unit: 2172

relationships between cited patents with source patents. Patents are represented as documents see figs. 104, 61, col. 102, lines 19-25).

As to claims 2 and 14, Rivette teaches the claimed limitation "an index" as an index 1208 (fig. 12C).

As to claims 3 and 15, Rivette teaches the claimed limitation "a graphical representation" as the system displays a list of patent citation report (fig. 61).

As to claims 4 and 16, Rivette teaches the claimed limitation "result is in a visual index form suitable for display or further analysis" as the system display a result such as Src pat 5327235 follows a list of sorted citing patent and Src pat 5359428 follows a list of short citing patents. Thus, the patent numbers 5327235 or 5359428 is represented as a visual index (fig. 61).

As to claims 5 and 17, Rivette teaches that "wherein said analysis means includes means to identify and display patterns in patenting activity, patterns in scientific research, patterns in commercial activity or patterns in popular interest in an area that can affect business or technology decisions" as competitive analysis identifies cited patents and displays cited patents includes images of patents which are related financial, scientific research (figs. 104, 111, col. 105, lines 25-50).

As to claims 11 and 23, Rivette teaches the claimed limitation "the step of formatting at least a portion of the data set which is not in a standard format into a standard format prior to utilizing the analysis means" as converting format of a text patent to another format (fig. 46).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivette in view of Pitkow et al (or hereinafter "Pitkow") (USP 6457028).

As to claims 6 and 18, Rivette discloses the claimed limitation subject matter in claim 1, except the claimed limitation "wherein said analysis means comprises an algorithm capable of bibliographic analysis". Pitkow teaches co-citation analysis (col. 3, lines 5-10).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Pitkow teaches of co-citation analysis to Rivette's system in order to identify documents of databases having similar contents.

Art Unit: 2172

6. Claims 7, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivette in view of Pitkow, Niwa et al (or hereinafter "Niwa") (USP 5987460) and Kostoff et al (or hereinafter "Kostoff") (USP 5440481).

As to claims 7 and 19, Rivette discloses the claimed limitation in claim 1, except the claimed limitation "an algorithm selected from the group consisting of co-occurrence analysis, co-word analysis and co-citation analysis". Pitkow teaches co-citation analysis (4, lines 66-67). Niwa teaches co-occurrence analysis (col. 16, lines 1-3). Kostoff teaches co-word analysis (col. 1, lines 55-60).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Pitkow's teaching of co-citation analysis and Niwa's teaching co-occurrence analysis and Kostoff's co-word analysis to Rivette's system in order to display the richness of the fine structure relations in the text, and provide orders of magnitude more details.

7. Claims 8-9 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivette in view of Kuhn et al (or hereinafter "Kuhn") (USP 6327565) and Haaland (US 2002/0059047).

As to claims 8 and 20, Rivette discloses the claimed limitation in claim 1, except the claimed limitation "an algorithm selected from the group consisting of Markov models, hidden Markov models, partial least squares and principal component analysis". Kuhn teaches hidden Markov models, principal component analysis (fig. 3, col. 1, lines 43-44; Abstract). Haaland teaches partial least squares (page 1, lines -30).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Kuhn's teaching of hidden Markov models, principal component analysis Haaland's teaching partial least squares to Rivette's system in order to index and display documents on a GUI.

As to claims 9 and 21, Rivette teaches the claimed limitation "wherein the data set comprises information from issued patents or patent applications" as (fig. 111).

8. Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivette in view of Kuhn and Haaland and further in view of the application's admitting prior art.

As to claims 10 and 22, Rivette discloses the claimed limitation subject matter in claim 8, except the claimed limitation "wherein said analysis means utilizes one or more of the group consisting of genetic algorithms, Bayesian learning, neural networks, Markov models, hidden Markov models, co-word analysis, co-citation analysis, partial least square, or principle component analysis". However, Application's admitting prior art teaches the document resources cited contain substantial information on technology, competitors, and market status indications. Document collections including expert analysis, co-occurrence analysis, co-word or cocitation analysis, Bayesian learning methods, Markov model, genetic algorithms, Bayesian learning, neural networks, partial least squares (page 2 col. Right, lines 45-67, col. Left, lines 18-22).



It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply application's admitting prior art of teaches the document resources cited contain substantial information on technology, competitors, and market status indications. Document collections including expert analysis, co-occurrence analysis, co-word or cocitation analysis, Bayesian learning methods, Markov model, genetic algorithms, Bayesian learning, neural networks, partial least squares to Rivette's system in order to index documents for saving time searching/retrieving documents.

9. Claims 12 and 24 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivette in view of the application's admitting prior art.

As to claims 12 and 24, Rivette teaches the claimed limitation "to create a visually displayable index to a selected set of documents" as the system display a result such as Src pat 5327235 follows a list of sorted citing patent and Src pat 5359428 follows a list of short citing patents. Thus, the patent numbers 5327235 or 5359428 is represented as a visual index (fig. 61). Rivette does not explicitly teach the claimed limitation "wherein said analysis means utilizes algorithms selected from the group consisting of co-citation analysis, co-word analysis, genetic algorithms, Bayesian learning, neural networks, Markov models, hidden Markov models, partial least squares, or principal component analysis". However, Application's admitting prior art teaches the document resources cited contain substantial information on technology, competitors, and market status indications. Document collections including expert analysis, coo-

Art Unit: 2172

occurrence analysis, co-word or cocitation analysis, Bayesian learning methods, Markov model, genetic algorithms, Bayesian learning, neural networks, partial least squares (page 2 col. Right, lines 45-67, col. Left, lines 18-22).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply application's admitting prior art of teaches the document resources cited contain substantial information on technology, competitors, and market status indications. Document collections including expert analysis, co-occurrence analysis, co-word or cocitation analysis, Bayesian learning methods, Markov model, genetic algorithms, Bayesian learning, neural networks, partial least squares to Rivette's system in order to index documents for saving time searching/retrieving documents.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Poote et al (US 2002/0028021).

**Contact Information**

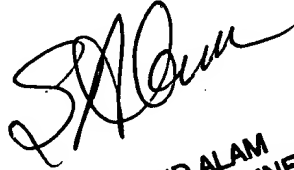
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam-Y Truong whose telephone number is (703-605-1169). The examiner can normally be reached on Mon-Fri from 8:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703-305-9790). The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Cam-Y Truong

12/4/03

  
SHAHID ALAM  
PRIMARY EXAMINER